

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

DATE MAILED: 05/05/2004

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/662,068	09/14/2000	Gerry R. Talbot	0939A-036911US	1454
7590 05/05/2004			EXAMINER	
Dan H Lang			DINH, NGOC V	
Townsend and	Townsend and Crew LLP		· · · · · · · · · · · · · · · · · · ·	
8th Floor			ART UNIT	PAPER NUMBER
Two Embarcadero Center			2187	
San Francisco, CA 94111-3834				

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	09/662,068	TALBOT ET AL.				
Office Action Summary	Examiner	Art Unit				
	NGOC V DINH	2187				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period w. - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	86(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days fill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONEI	nely filed s will be considered timely. the mailing date of this communication. O (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 08 Ma	arch 2004.					
2a)⊠ This action is FINAL . 2b)☐ This	∑ This action is FINAL. 2b) This action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	3 O.G. 213.				
Disposition of Claims						
4)⊠ Claim(s) <u>53,54 and 56-70</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>53,54 and 56-70</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	election requirement.					
Application Papers						
9) The specification is objected to by the Examine	r. ·					
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the	drawing(s) be held in abeyance. See	e 37 CFR 1.85(a).				
Replacement drawing sheet(s) including the correcti						
11) The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priority application from the International Bureau * See the attached detailed Office action for a list 	s have been received. s have been received in Applicati ity documents have been receive ı (PCT Rule 17.2(a)).	on No ed in this National Stage				
	•					
Attachment(s)						
1) Notice of References Cited (PTO-892)	4)					
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date		atent Application (PTO-152)				
S. Patent and Trademark Office						

Art Unit: 2187

DETAILED ACTION

FINAL REJECTION

1. This Office Action is responsive to Amendment filed 03/08/04 in which claims 53, 56, 62, 64, 68-69 are amended.

Applicant's previous arguments are moot with regard to claims 53-54, 56-70 in view of the new rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 53-54, 56-70 are rejected under 35 U.S.C.102 (e) as being anticipated by Gilbertson PN 6,240,458.

2. As per claims 53, 56:

With respect to claim 53, Gilbertson teaches in a data processing system, a method for ordering a plurality of memory access requests, the method comprising: accepting the plurality of memory access requests; ordering the plurality of memory access requests ["A "simple rotational" priority scheme involves changing the requester priority on a periodic basis."; col. 2, lines 15-20], wherein the plurality of memory access requests are ordered based on age and availability of corresponding memory locations, and after the ordering associated with a memory access request of the plurality of memory access requests;

With respect to claim 56, Gilbertson teaches receiving the plurality of memory access requests by a queue [fig. 5]; reordering plurality of memory access requests [queue logic 510, fig. 5] in the queue ["A "simple rotational" priority scheme involves changing the requester priority on a periodic basis."; col. 2, lines 15-20; col. 21, lines

Art Unit: 2187

39-50] based on their age and the availability of target memory addresses, wherein a target memory address is associated with a memory access request of the plurality of memory access requests, after reordering associated with a memory access request of the plurality of memory access requests [col. 2, lines 15-35; col. 17, lines 29-55; col. 18, lines 1-45; col. 20, lines 32-45; col. 21, lines 39-50].

3. As per claims 54, 57-58:

With respect to claim 54, Gilbertson teaches plurality of memory requests comprises at least three memory access requests [col. 19, lines 24-26].

With respect to claims 57 and 58, Gilbertson teaches reordering provides for at least two memory access requests with available target memory addresses [col. 19, lines 15-30; col. 21, lines 39-50]; servicing is done sequentially [e.g., FIFO queue, col. 6, lines 50-55].

4. As per claims 59-61:

With respect to claim 59, Gilbertson teaches queue is a priority queue, wherein a first memory access requests with higher priority than a second memory access request is executed before second memory access request memory access request [col. 21, lines 39-50].

With respect to claim 60, Gilbertson teaches reordering result in a queue having a first memory access request with an availability target memory preceding a second memory access request with an unavailable target memory address [col. 21, lines 39-50].

With respect to claim 61, Gilbertson teaches after servicing of plurality of memory access requests, returning results of servicing according to a received order of plurality of memory access requests by queue [e.g., "memory requests are not necessarily processed in the order in which they are received from POD 120A. Therefore MSU 110A must inform POD 120A which request is associated with returned data", col. 9, lines 45-65].

Art Unit: 2187

5. As per claims 62-70:

Claims 62-70 basically are the necessary elements that carry out the corresponding operating steps of claims 53-61. Accordingly, claims 62-70 are rejected as the same reason as set forth in claims 53-61.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for response to this final action is set to expire THREE MONTHS from the date of this action. In the event a first response is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event will the statutory period for response expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ngoc Dinh whose telephone number is (703) 305-3023. The examiner can normally be reached on Monday-Friday 8:30 AM-5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald A. Sparks, can be reached on (703) 308-1756. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7239 for regular communications and (703) 746-7238 for After Final communications.

Art Unit: 2187

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)

305-3900.

NGOC DINH

Patent Examiner

ART UNIT 2187

April 29, 2004

DONALDS A. SPARKS

Supervisor Patent Examiner

Technology Center 2100